DOCUMENT RESUME

ED 264 825 IR 011 908

AUTHOR Brey, Ronald; Grigsby, Charles
TITLE Annenberg/CPB Project: A Study of Telecourse Students (Executive Summary) [and] Telecourse Student Survey, 1984.
SPONS AGENCY Corporation for Public Broadcasting, Washington, D.C.
PUB DATE 84
NOTE 69p.; A Project of the Instructional Telecommunications Consortium, American Association of Community and Junior Colleges funded by the Annenberg/CPB Project. For related documents, see IR 011 905-907.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Adult Students; *Distance Education; Educational Television; Higher Education; Nontraditional Students; Questionnaires; Research Methodology; *Student Characteristics; Surveys; Tables (Data); Teaching Methods; *Telecourses

ABSTRACT

To determine demographic characteristics of students enrolled in a variety of telecourses and some of the factors that led to their enrollment, the Annenberg/CPB (Corporation for Public Broadcasting) Project funded a study in which 8,000 students enrolled in 42 telecourses were surveyed during the spring of 1984. Data from the study were tabulated by state, course type, and selected individual courses, and were subjected to a variety of other analyses. The survey posed 16 questions to telecourse students to elicit information on their personal characteristics and reasons for involvement with telecourses. An important finding of the survey was that telecourse students differ from on-campus students in several important characteristics: (1) telecourse students are more likely to be women, to have dependents at home, and to be employed; (2) telecourse students have a wide variety of educational backgrounds; (3) 20% of the telecourse students were enrolled for the first time in the college where they were taking the course and about the same proportion were enrolled only in the telecourse; and (4) 20% had earned an associate's degree. Additional findings indicate that more than half of the telecourse students reported enrolling because on-campus sections did not fit into their schedules; 85% of the students view the video programs at home; and the most important marketing tool for attracting on-campus students was the college's semester class schedule. Individual course comparisons, study methodology, cross-tabulations, telecourses included in the survey, participating colleges, and the questionnaire are presented in the student survey report that accompanies the executive summary. (JB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED264825

ANNENBERG/CPB PROJECT:

A STUDY OF TELECOURSE STUDENTS (EXECUTIVE SUMMARY)

and

TELECOURSE STUDENT SURVEY, 1984

IR 011 908

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

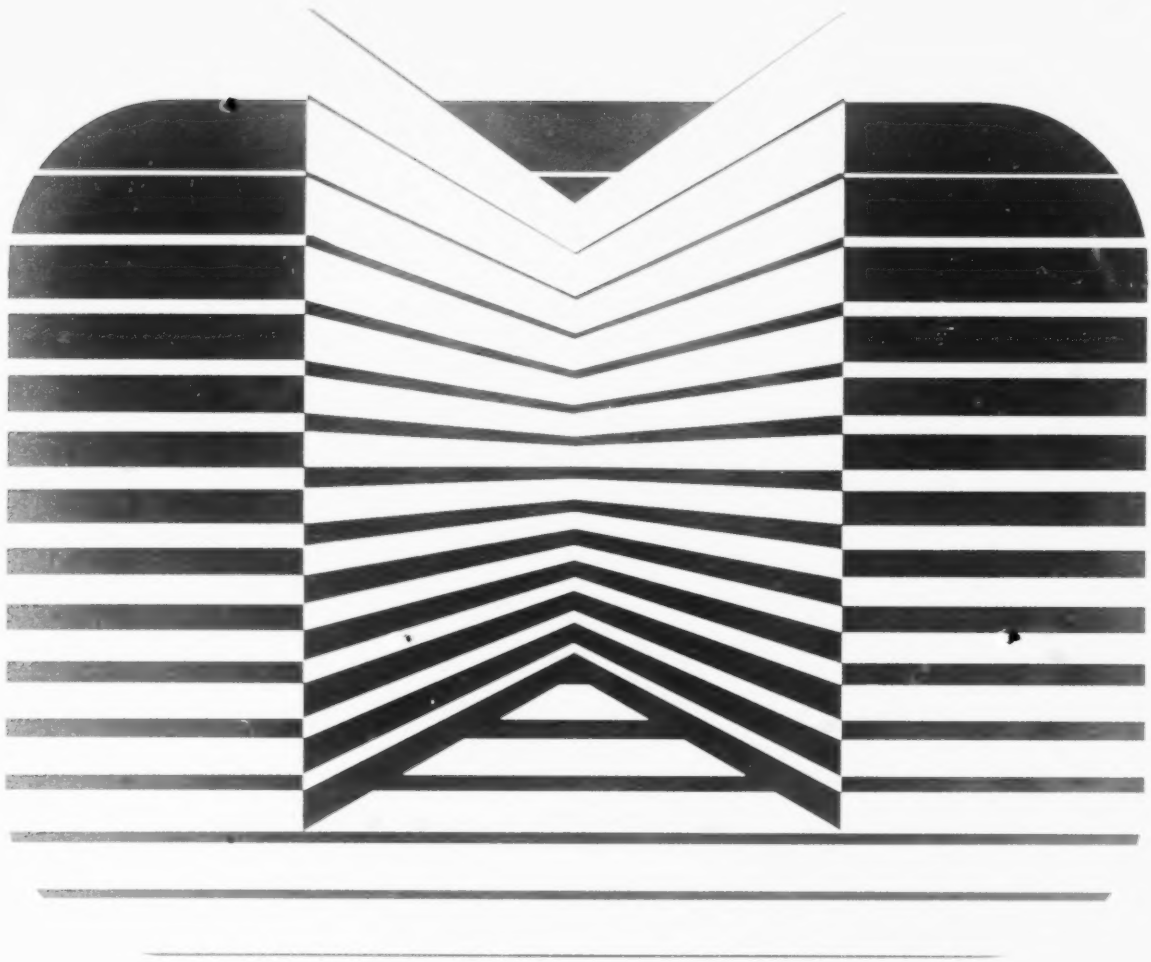
Peter J. Dirr

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A Study of Telecourse Students

1984

(Executive Summary)



A Report From
The Annenberg/CPB Project

Executive Summary

A Study of Telecourse Students

1984

The Annenberg/CPB Project

The contents of this Executive Summary are excerpted from a longer report submitted to the Annenberg/CPB Project by Ronald Brey and Charles Grigsby, Austin Community College.

A STUDY OF TELECOURSE STUDENTS -- 1984

Abstract

This study surveyed 8,000 students enrolled in 42 telecourses at colleges and universities across the United States. The major findings of the study were:

- Over two-thirds of the students were female.
- Only 23 percent of the students were the traditional college age, 18 to 22 year olds. The rest were older, especially in the 23 to 39 year old categories. The proportion of women increased with age.
- About 20 percent were enrolled only in the television course and were new students drawn to the college by the television course. For 15 percent, it had been six years or more since they had any formal education.
- Apparently, 80 percent were using the television course to accelerate their college education; 40 percent were enrolled in ten or more credit hours including the television course.
- Forty percent reportedly enrolled in the television course because an on-campus section of the course would conflict with their work schedules.
- This was the first television course for almost two-thirds of the group.
- Eight out of every ten students intended to view the television programs at home. This was especially true for students who were older, female, married, and not concurrently enrolled in on-campus courses.
- The semester course schedule was the most effective way to promote the course and to attract students to it. This was especially true for on-campus students. Newspapers ads and articles and recommendations from friends were also effective means for attracting off-campus students.

A STUDY OF TELECOURSE STUDENTS -- 1984

In an effort to learn more about the students that enroll in a variety of television-based courses (referred to as telecourses), the Annenberg/CPB Project funded the authors to conduct this study. The purpose was to determine demographic characteristics of the students as well as some of the factors that led to their enrollment in the courses.

Almost 8,000 students enrolled in telecourses throughout the United States were surveyed during the spring of 1984. These students were enrolled in 42 different college credit telecourses offered mostly by community colleges. The data from the study were tabulated by state, by course type, by selected individual courses, and were subjected to a variety of other analyses.

This is the first survey to provide comparative data on the telecourse student population in the United States. As such, it offers the first comprehensive breakdown of characteristics of this population. Analysis of these characteristics provides information which the authors hope will be useful to institutions in marketing telecourses; it also paves the way for further research.

The survey posed 16 questions to telecourse students,

having to do with personal characteristics and their involvement with telecourses. An important finding of the survey was that telecourse students differ from on-campus students in several important characteristics.

Telecourse students are more likely to be women, to have dependents at home, and to be employed. They are also older than the average student. Almost two-thirds were women and almost half were thirty years or older. There were significant age differences among the courses offered. Professional development courses especially tended to attract older students. Approximately two-thirds of the students were married and over half had at least one dependent. About 80 percent were employed, over half being employed full time.

Telecourse students have a wide variety of educational backgrounds. The type of telecourse they enroll in varies according to whether it is their first time at this college and how long it had been since they last attended college.

The study clearly indicated that certain courses appeal to students with certain characteristics. Data processing telecourses, for example, attract older students who wish to do their coursework off-campus. Twenty percent of the telecourse students were enrolled for the first time in the college where they were taking the course, and about the

same proportion were enrolled only in the telecourse. Twenty percent had already earned at least an associate degree. Over two thirds had some schooling on a regular basis within the previous year. Almost two-thirds were concurrently enrolled in on-campus courses, with 40 percent being enrolled for ten or more credit hours.

More than half of the telecourse students reported enrolling in telecourses because on-campus sections of the course did not fit into their schedules. The telecourses, therefore, allow some students to go to school who would not otherwise have that option. For others, it means they can enroll in additional courses during a semester. About two-thirds of the students were taking their first telecourse; one-third had taken a telecourse previously.

Eighty-five percent of the telecourse students view the video programs at home. This is to be expected, because most students give as their primary reason for enrolling in telecourses their inability to attend a regularly scheduled on-campus course. Female, married, older, and parttime students especially view the programs at home. However, the ability to view programs on-campus or at public sites is an important feature of most college telecourse programs.

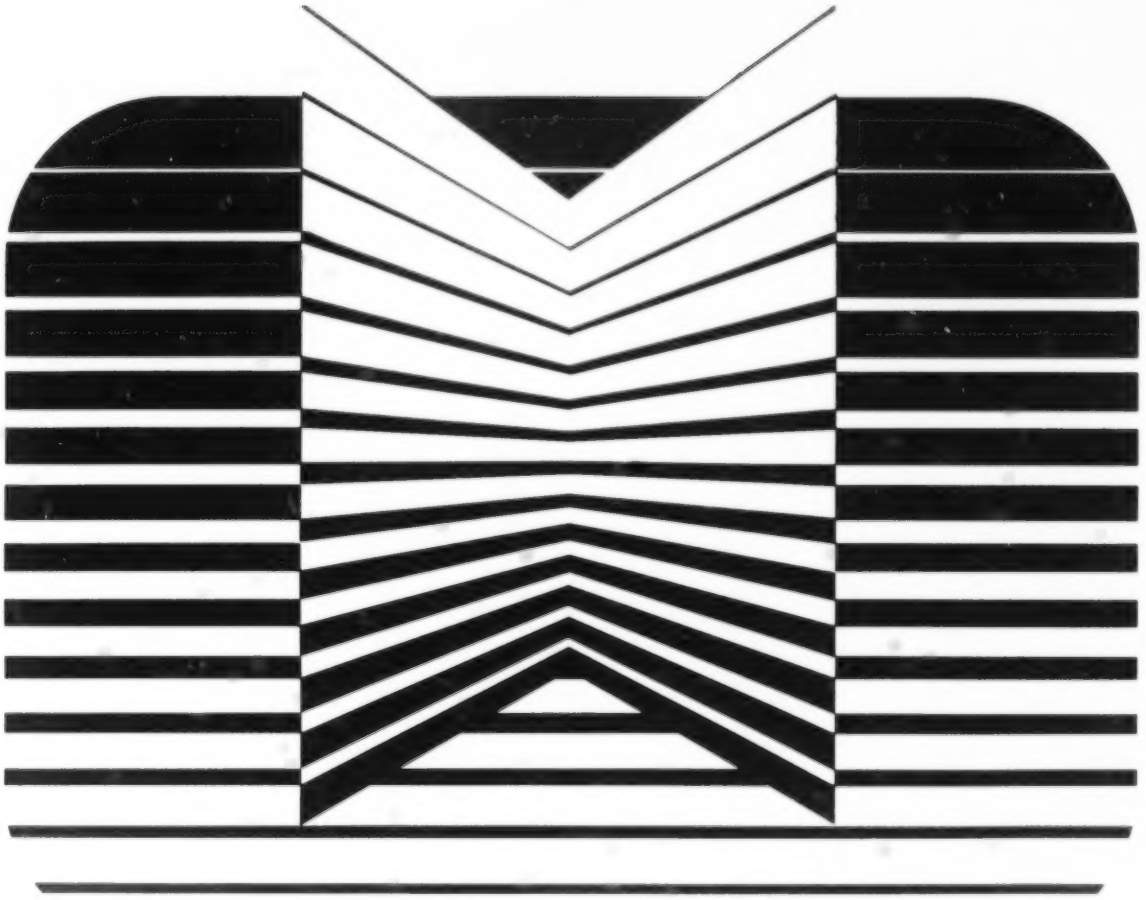
Some findings will be of particular interest to colleges planning promotional activities. The findings

suggest, that certain student populations would be logical targets for promotion. The data show, for example, that telecourses attract both former and new students; college promotional activities, therefore, should keep both of these markets in mind. This might require designing unique promotional campaigns for each group. Special promotional materials for each course might also be warranted by the finding that students enroll in different courses for different reasons.

The college's semester class schedule was found to be the most important marketing tool for attracting on-campus students, while newspapers were found to be most effective for attracting off-campus students. Television and newspaper announcements appear to be especially effective in reaching older students and first-time students.

The survey identified additional issues and suggested additional questions for future study.

TELECOURSE STUDENT SURVEY 1984



The Annenberg/CPB Project

American Association of Community and Junior Colleges

TELECOURSE STUDENT SURVEY 1984

A PROJECT OF

THE INSTRUCTIONAL TELECOMMUNICATIONS CONSORTIUM,
AMERICAN ASSOCIATION OF COMMUNITY AND JUNIOR COLLEGES

FUNDED BY

THE ANNENBERG/CPB PROJECT

Ron Brey
Austin Community College
and
Charles Grigsby
The Resource Group
Austin, Texas

1984

IR011908

TABLE OF CONTENTS

Preface 1

Introduction 3

Part I: General Observations 7

Part II: Aggregated Course Comparisons 19

Part III: Individual Course Comparisons 27

Part IV: Methodology 35

Part V: Cross-Tabulations 41

Part VI: Interpretation of Beta Weights 47

Concluding Comments 55

Appendix A: Telecourses 57

Appendix B: Participating Colleges 58

Appendix C: Questionnaire 59

PREFACE

Members of the Instructional Telecommunications Consortium (ITC) are the primary users and developers of telecourses in the United States and Canada. Although enrollments and course offerings have been expanding, few comparative data have been obtained on the background of telecourse students, why they enroll, or how they use the video programs. Although most colleges have conducted their own research, it has not been possible to make comparisons among institutions because different questions and data-gathering techniques were used.

As the number of telecourses being offered has increased and more technologies to permit student viewing of the programs have become available, members of the ITC have become increasingly concerned about the lack of comparative data.

The ITC believes that its responsibilities include conducting research for its members and the broader postsecondary community on telecourses and other aspects of instructional telecommunications systems. Consequently, in 1983, the ITC decided that an appropriate first step would be to survey telecourse students enrolled at its member institutions to determine the background of telecourse students, how they learned about telecourses, and how they intended to view programs.

After examining several survey instruments currently in use, ITC members developed an instrument appropriate for use in the comparative survey. It soon became apparent that the ITC alone could not finance the data entry, statistical analysis, and consultants necessary for the survey. The ITC then approached the Annenberg/CPB Project with a request for funding assistance.

BEST COPY AVAILABLE

The Project awarded a grant to the ITC in December 1983, and the project was launched.

ITC members designed the questionnaire at their 1983 fall meeting. It was refined under Peter Dirr's direction. The survey instrument is included in Appendix C. This reports presents the survey results.

ACKNOWLEDGEMENTS

The authors would like to thank the following individuals: Peter Dirr and the Annenberg/CPB Project for funding that made the report possible; Augusta Julian, Durham Technical Institute, and Theodore W. Pohrte, Dallas County Community College District, for their comments and suggestions; and the members of the Instructional Telecommunications Consortium and its executive director, Jim Zigerell, for their support.

Opinions expressed in the report are those of the authors and do not necessarily represent those of the Annenberg/CPB Project or the Instructional Telecommunications Consortium.

INTRODUCTION

Almost 8,000 students enrolled in telecourses throughout the United States were surveyed during the spring of 1984. These students were enrolled in 42 different college credit telecourses offered mostly by community colleges. The data from the study were tabulated by state, by course type, by selected individual courses, and were cross-tabulated and subjected to discriminate analysis.

This is the first survey to provide comparative data on the telecourse student population in the United States. As such, it offers the first comprehensive breakdown of characteristics of this population. Analysis of these characteristics provides information that the authors hope will be useful to institutions in marketing telecourses; it also paves the way for further research.

The survey posed 16 questions to telecourse students, having to do with personal characteristics and their involvement with telecourses. An important finding of the survey was that telecourse students differ from on-campus students in several important characteristics.

Telecourse students are more likely to be women, to have dependents at home, and to be employed. They are also older than the average student. Almost two thirds were women, and almost half were 30 years or older. There were significant age differences among students, depending on the course offered. Professional development courses especially tended to attract older students. Approximately two thirds of the students were married, and over half had at least one dependent. About 80 percent were employed, over half being employed full time.

Telecourse students have a wide variety of educational backgrounds. The type of telecourse they enroll in varies according to whether it is their

first time at college or how long it had been since they last attended college.

The study clearly indicated that certain courses appeal to students with certain characteristics. Data processing telecourses, for example, attract older students who wish to do their coursework off campus. Twenty percent of the telecourse students were enrolled for the first time in the college where they were taking the course, and about the same proportion were enrolled only in the telecourse. Twenty percent had already earned at least an associate degree. Over two thirds had some schooling on a regular basis within the previous year. Almost two thirds were concurrently enrolled in on-campus courses, with 40 percent being enrolled for 10 or more credit hours.

More than half of the telecourse students reported enrolling in telecourses because on-campus sections of the course did not fit into their schedules. The telecourses, therefore, allow some students to go to school who would not otherwise be able to. For others, it means they can enroll in additional courses during a semester. About two thirds of the students were taking their first telecourse; one third had taken a telecourse previously.

Eighty-five percent of the telecourse students view the video programs at home. This is to be expected, because most students give as their primary reason for enrolling in telecourses their inability to attend a regularly scheduled on-campus course. Female, married, older, and part-time students especially view the programs at home. The ability to view programs on-campus or at public sites, however, is an important feature of most college telecourse programs.

Some findings will be of particular interest to colleges planning promotional activities to target certain student populations. The data show, for example, that telecourses attract both former and new students. College

promotional activities, therefore, should keep both of these markets in mind. This might require designing unique promotional campaigns for each group. Special promotional materials for each course might also be warranted by the finding that students enroll in different courses for different reasons.

The semester class schedule was found to be the most important marketing tool for attracting on-campus students, while newspapers were found to be most effective for attracting off-campus students. Television and newspaper announcements appear to be especially effective in reaching older students and first-time students.

The survey identified additional issues and suggested additional questions for future study.

PART I

GENERAL OBSERVATIONS

Although the states show generally consistent responses to many of the questions, there are notable exceptions. Oklahoma responses vary considerably from the national trends, but the greatest variations occur in North Carolina.

The results suggest that the telecourse student population of North Carolina is different from the telecourse student populations of other states. North Carolina telecourse students are older, more likely to be married or divorced, much more likely to be enrolled in college for the first time, and it has been longer since they were last in school. More of them learn about telecourses through print advertising; they are less likely to be enrolled in on-campus classes; and their first telecourse is likely to be viewed at home from a PBS broadcast.

There are several possible explanations for the strongly divergent pattern in North Carolina. These explanations are not mutually exclusive.

1. North Carolina has offered telecourses for several years but not for nearly as long as most other states in the survey. Colleges in a state offering telecourses for a shorter time might attract a different type of student. The reasons for this are not clear, but it might be due in part to the fact that when telecourses are first introduced, they are often promoted to the public through newspaper ads. These ads tend to attract the attention of older adults who are interested in general-interest and job-related telecourses more than in obtaining a college degree.
2. Differences among states may be associated with differences among the types of telecourses offered. Six of the 16 telecourse sections reported from the North Carolina colleges were "The New Literacy," and two were "Making It Count." (Together they represent 50 percent of the courses

sampled there.) Both are introductory computer courses that appeal to older, non-traditional students and might be highly job related. The total telecourse enrollment in North Carolina was 242, with 135 enrollments in "The New Literacy." An additional 27 students were enrolled in "Making It Count." (These data relate to the comments in section 3, below.) Thus, North Carolina may be unique because the preponderance of North Carolina data are based on these enrollments.

3. Some of the differences in North Carolina may be explained by the type of two-year institution that is common in that state. These North Carolina institutions do not provide the broad general academic programs found in the two-year institutions surveyed in other states; rather, they focus on vocational and technical training. Thus, their potential market may be somewhat different.

4. Two-year institutions in North Carolina do not have a standard academic calendar. Their semesters may begin and end as much as a month apart. Some of the institutions are on a quarter system. They are therefore often incompatible with the Adult Learning Service's broadcast schedule and might discourage the colleges from offering other non-career telecourses that might appeal to different audiences. For example, telecourses at Durham Technical Institute, which is on a quarter system, must be offered as a unique semester with its own discrete dates. Because the telecourse schedule may not be included in the on-campus course schedule or other promotional activities, newspaper advertisements are the most widely used means of promotion.

STATE COMPARISONS

Data for states with more than one participating institution were tabulated and are listed at the end of this section of the report. Six states were compared in an effort to identify differences in student telecourse populations: California, Florida, Illinois, North Carolina, Oklahoma, and Texas. The number of participating colleges in each state is as follows:

California	11
Florida	8
Illinois	3
North Carolina	9
Oklahoma	6
Texas	4

The overall patterns are similar among the states even though there are some noteworthy differences in the courses offered, delivery systems, and the length of history of the telecourse programs.

A number of variables are consistent among the states. This section will begin with a brief analysis of the overall response pattern to each question and the data in percentages by state. At the end of the section some specific comparisons between states are made. The number of usable responses of each is as follows:

California	1,249	
Florida	1,218	
Illinois	108	
North Carolina	242	
Oklahoma	734	
Texas	3,567	
TOTAL	.....	7,118

The usable number of student surveys for state comparisons is less than the total sample. To prevent the identification of data by institution, those states with only one participating institution are not included.

All numbers in the following tables are percentages.

Gender

In all states, the majority of telecourse students is female, although

there is a variation of 13 percentage points. Illinois has the largest percentage of female students (78 percent) and Oklahoma the smallest (58 percent).

Gender (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Female	72	66	78	73	65	67	68
Male	28	34	22	27	35	33	32

Age

There are substantial variations in age patterns of students by state. Students in North Carolina are more likely to be at least 30 years of age than in any other state. North Carolina has 59 percent in this age group; at the other extreme, Florida has 35 percent. North Carolina's community colleges tend to offer more vocational and technical skills training and retraining than institutions in other states. The telecourses offered, and the system as a whole, may attract older students. There also may not be as high a percentage of transfer and general education students as in other states.

Age (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Under 18	1	1	0	3	1	1	1
18 - 21	17	34	31	13	15	20	21
22 - 29	32	29	25	26	35	38	34
30 - 39	32	24	26	28	29	29	29
40 - 49	13	8	15	20	15	10	11
50 - 59	4	3	3	11	5	3	4

Ethnic Background

The ethnic background of students varies according to state populations. The relatively large percentage of black students in Illinois reflects the fact that Illinois data are from the Chicago metropolitan area, with the largest number of responses from the City College of Chicago.

Ethnic Background (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Black	11	7	20	11	8	8	8
Caucasian	74	88	78	88	82	86	84
Hispanic	7	2	0	0	3	4	5
Oriental	4	2	2	0	3	1	2
Other	3	1	1	0	4	1	2

Marital Status and Number of Dependents

The majority of students is married, and more than 50 percent have at least one dependent. Approximately one third are single. As we would expect, the larger the percentage of married students, the larger the percentage of students with dependents.

Marital Status (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Single	38	48	48	29	25	33	35
Married	51	41	37	56	64	55	54
Divorced	12	10	15	15	10	11	11

Number of Dependents (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
0	45	54	55	52	36	44	45
1	19	18	11	19	19	18	18
2	18	14	18	17	21	17	18
3	9	8	8	6	12	11	10
4	5	5	4	11	9	6	5
5 or more	2	1	5	5	3	3	3

Employment

Over 80 percent of those sampled nationally were employed. This is an important characteristic of students in virtually every form of off-campus instruction. In three of the six states, more than half the students were employed full time. In none of the six states did the percentage of unemployed students exceed 25 percent.

Employment (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Not employed	21	17	11	18	24	18	19
20 hours or fewer	13	14	25	9	7	8	10
20 hours - 39 hours	17	25	31	13	13	17	18
40 hours or more	49	44	33	60	56	57	53

First Semester Enrolled in This College

Eighty percent of all telecourse students had enrolled previously in college credit courses. Florida students are more likely to have enrolled in other credit courses before enrolling in this telecourse (93 percent); North Carolina students are less likely (54 percent).

First Semester Enrolled in this College (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Yes	20	7	14	46	26	19	20
No	80	93	86	54	74	81	80

Highest Level of Education Completed

Almost all telecourse students were graduated from high school or had received a GED. There are differences among states in the amount of postsecondary education students earned before enrolling in telecourses. The most variation among states is in the percentage of students who have had some college--a range of 28 percentage points.

The states with the largest proportion of students with some college experience but no college degree are Texas and Florida. North Carolina has the largest percentage of students with only a high school diploma as well as the most students with a bachelor's degree or higher.

Highest Level of Education Completed (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Less high school graduate	1	0	1	3	2	2	1
High school graduate ...	12	11	9	21	16	10	12
Some college	65	71	54	44	63	72	68
Associate degree	12	10	23	8	7	9	10
Bachelor's degree	8	6	9	17	7	5	7
Master's degree	2	1	4	5	3	1	2
Beyond Master's degree .	6	0	0	1	2	0	1

Years Since Last Attended School or College

In all states except North Carolina, the percentage of students who had attended school within the last year was close to the total national sample of 69 percent. The data for North Carolina support the observation that telecourse students in that state tend to be practicing professionals who enroll in telecourses in order to improve job-related skills.

Years Since Last Attended School or College (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Less than 1	66	77	71	33	60	73	69
1 - 5	20	13	17	28	20	16	17
6 - 10	6	4	4	13	9	5	6
11 - 20	6	4	6	13	8	4	6
More than 20	3	2	2	13	4	2	3

How Discovered This Telecourse

This question was designed to identify the success of various activities colleges used to promote telecourses. It allowed, however, for discovery of the courses by means not under the direct control of the college, such as through friends. This question showed the greatest spread in percentages for responses to any question. In California, 77 percent of the students learned about the telecourse from the semester course schedule; in North Carolina, 28 percent did so, a spread of 49 percentage points.

Other notable differences exist in the responses to this question, particularly in the category of newspaper advertisements. Most colleges in

North Carolina place newspaper advertisements. The college with the largest enrollment, Durham Technical Institute, does a great deal of advertising. Also, telecourses are not always included in the regular course schedule because they often begin at different times from on-campus classes.

How Discovered This Telecourse (Percentage)

	CA	FL	IL	NC	OK	TX	TOTAL
Semester course schedule	77	72	71	28	32	59	61
Telecourse brochure	6	4	8	16	10	8	8
Faculty advisor-counselor	3	6	10	10	10	6	6
Place of employment	2	2	0	8	6	2	3
Friend	6	11	9	8	12	17	13
Local PBS station	1	1	0	1	5	2	2
Local cable TV	1	0	1	1	7	1	1
Newspaper advertisement	1	1	0	24	13	2	3
Other	2	2	0	4	4	4	4

Currently Enrolled in On-Campus Courses

Approximately two thirds of telecourse students are currently enrolled in on-campus classes (63 percent). This supports the conclusion made above that students take telecourses as part of an overall strategy to advance their education. Two states, North Carolina and Oklahoma, demonstrated markedly low percentages. The percentage for Florida is the highest. Part of the explanation for North Carolina's data may be that on-campus classes and telecourses begin at different times.

Currently Enrolled in On-Campus Courses (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Yes	64	79	72	35	53	65	63
No	36	21	28	65	47	35	37

Credit Hours Enrolled in This Semester

Eighteen percent of the respondents indicated that they were enrolled in only one telecourse for a total of three or fewer hours. Approximately 20 percent were also enrolled in each of the other categories: two, three, or

four or more courses. Further studies may determine if the distribution of course loads of telecourse students is similar to that of all students at two-year institutions.

Credit Hours Enrolled in This Semester (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
3 or fewer	23	11	19	34	29	13	18
4 - 6	24	23	18	31	22	26	25
7 - 9	17	18	13	7	10	22	18
10 - 12	16	19	20	11	19	19	18
Over 12	20	30	30	17	19	21	22

Most Important Reason for Enrolling in the Telecourse

The reason students cited most often for enrolling in telecourses was that the schedule of on-campus classes conflicted with work (41 percent). Twelve percent reported that the schedule of on-campus classes conflicted with their leisure activities. Approximately 20 percent had a reason for enrolling that was not included on the questionnaire. For a variety of reasons, but primarily because of scheduling conflicts, students enrolled in instructional television courses in order to take additional courses.

Most Important Reason for Enrolling in the Telecourse (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
Conflicts work	36	44	33	29	38	44	41
Conflicts leisure	10	11	8	9	11	13	12
Prefer at home	17	17	14	15	18	18	17
Interesting content	15	6	15	23	8	5	8
Transport problems	2	3	2	4	7	3	3
Other	20	19	30	19	18	18	19

Respondent's First Telecourse

Re-enrollment patterns may be an indirect measure of student satisfaction with telecourses. It is logical to expect that satisfied students enroll in additional telecourses over time and become a larger percentage of total telecourse enrollments.

The results suggest that re-enrollment patterns are, indeed, an indirect

measure of student satisfaction. The states with a long history of telecourse offering, California, Florida, Illinois, and Texas, have significantly higher percentages of repeating students. The overall re-enrollment percentage is 36 percent. It will be interesting to see whether this figure increases or levels off.

Respondent's First Telecourse (Percentage)

	CA	FL	IL	NC	OK	TX	TOTAL
Yes	69	56	69	90	87	58	64
No	31	44	31	10	13	42	36

Credit Hours Earned Before by Telecourse

"Yes" responses to this question provide a validation check of re-enrollment patterns. Sixty-five percent report that they have not earned any credit before by telecourse and 64 percent that the current telecourse was their first. Thus, the two sets of responses are consistent.

Credit Hours Earned Before by Telecourse (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
0	70	57	69	89	85	60	65
1 - 6	22	33	26	9	12	26	24
7 - 12	5	7	3	2	2	9	7
13 - 18	2	1	0	0	1	3	2
19 - 24	0	1	1	0	0	1	1
25 or more	1	1	2	0	1	1	1

How Student Intends to View Most of the Programs

The number of sites where students can view telecourse video programs--home, campus, workplace, and public libraries--is increasing. Also, more delivery systems are becoming available throughout the country, including broadcast television, cable television, videocassettes, videodiscs, and ITFS. Student viewing patterns are important for telecourse administrators, because a poor match between student preferences and availability of actual delivery systems will adversely affect enrollments and completion rates.

The large percentage of "At home--PBS" viewers is inflated to some extent. An examination of individual college data indicates that many students responded "At home--PBS" even if the course was not being broadcast on the local PBS station, but was instead cablecast. Nevertheless, the data do provide a clear picture of library versus at-home viewers: 14 percent view in a library and 84 percent at home. In Illinois, only a few of the courses are broadcast or cablecast. A large percentage of campus viewing (55 percent) characterizes the telecourse student population of this state.

How Student Intends to View Most of the Programs (Percent)

	CA	FL	IL	NC	OK	TX	TOTAL
At home--PBS	73	65	19	77	63	65	67
At home--cable	17	13	11	10	27	17	17
College library	7	18	55	11	7	14	13
Public library	0	1	13	0	1	2	1
At my work site	1	1	0	2	2	1	1
Other	2	1	1	0	0	1	1

SUMMARY

Additional explanation of patterns and deviations will be suggested in this report when the data for aggregated and specific courses are compared, and the cross-tabulations of student characteristics and viewing patterns are analyzed.

PART II

AGGREGATED COURSE COMPARISONS

Data for telecourses were grouped by type of course for comparison. Data from 36 of the 42 courses were included in the aggregated courses comparison analysis. Seven course types were identified.

Business (BUS)

The Business of Management
It's Everybody's Business
Personal Finance and Money Management

Data Processing (DPC)

Computers at Work
Making It Count
The New Literacy

English (ENG)

Communicating Through Literature
English Composition I & II
English Composition II
Reading Improvement
Writing for a Reason

Humanities (HUM)

The Art of Being Human
The Ascent of Man
Humanities Through the Arts
In Our Own Image

Math Physical Science (MPS)

Earth, Sea & Sky
Introducing Biology
Introduction to Mathematics
Oceanus
Of Earth and Man
Project Universe

Other (OTH)

Contemporary Health Issues
Here's to Your Health
Voyage

Social Sciences (SOC)

America: The Second Century
American Government I
American Government II
American Government Survey
The American Story
Faces of Culture
Family Portrait
Focus on Society
The Growing Years
The Money Puzzle
History of Mexico
Understanding Human Behavior

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Responses	869	651	564	457	829	265	3,660	7,295

The data tend to show more similarities than differences among respondents enrolled in these groups of courses. General observations and the few noteworthy differences in the data are presented in this section.

Gender

Twice as many women as men are enrolled in these telecourses. The breakdown is fairly consistent across all courses offered.

Gender (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Female	67	69	66	67	67	72	69	68
Male	33	31	34	33	33	28	31	32

Age

Almost half of the students are at least 30 years old. Students enrolled in DPC courses tend to be older. The DPC category has the largest percentage of students 30 and older (62 percent); BUS, within 45 percent, has the next highest percentage. DPC also has the lowest percentage of students under 22 years of age.

Age (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Under 18	1	1	1	0	1	0	1	1
18 - 21	20	10	21	29	27	28	21	21
22 - 29	34	27	37	30	33	30	36	34
30 - 39	29	33	29	27	26	29	30	29
40 - 49	13	19	10	11	11	11	10	11
50 - 59	3	10	3	0	3	2	3	4

Ethnic Background

There is little variation in the composition of ethnic backgrounds in the seven course types.

Ethnic Background (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Black	7	7	9	8	6	11	8	8
Caucasian	85	84	86	84	85	78	84	84
Hispanic	5	4	3	3	5	5	5	5
Oriental	1	3	1	4	2	2	2	2
Other	2	2	1	1	2	3	2	2

Marital Status and Number of Dependents

Single students and students without dependents enroll most frequently in HUM, MPS, and OTH courses. The largest percentage of married students are enrolled in DPC courses.

Marital Status (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Single	32	27	34	43	43	44	34	35
Married	56	60	53	44	46	40	55	54
Divorced	12	13	12	13	12	16	10	11

Number of Dependents (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
0	43	43	41	54	51	51	45	45
1	19	19	19	15	17	16	19	18
2	19	19	17	17	16	16	18	18
3	9	10	11	9	10	10	11	10
4	6	5	6	4	4	6	5	5
5 or more	3	3	5	1	2	2	3	3

Employment

Students employed full-time are most likely to be enrolled in BUS, ENG, and DPC courses. This may be because they prefer to improve job-related skills instead of fulfilling a degree requirement. The data also indicate that these students are least likely to be enrolled in on-campus classes.

Employment (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Not employed	16	20	18	16	18	22	20	19
20 hours or fewer	9	9	8	15	12	14	10	10
20 hours - 39 hours ..	14	12	17	23	19	19	19	18
40 hours or more	61	60	57	46	52	45	51	53

First Semester Enrolled in This College

DPC courses have the largest percentage of first-time enrollers. This supports the observation made above that these students are less likely to take telecourses as part of a plan to obtain a degree.

First Semester Enrolled in This College (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Yes	23	40	23	11	11	15	20	20
No	77	60	77	89	89	85	80	80

Highest Level of Education Completed

DPC and HUM courses seem to attract the more educated students than do other courses.

Highest Level of Education Completed (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Less high school graduate	1	2	3	1	0	0	2	1
High school graduate ..	13	16	15	11	9	9	10	12
Some college	67	50	76	72	72	73	70	68
Associate degree	9	9	4	11	12	12	10	10
Bachelor's degree	8	15	9	4	5	5	6	7
Master's degree	2	7	1	0	2	1	2	2
Beyond Master's degree	1	2	0	0	0	0	0	1

Years Since Last Attended School

DPC attracts students who tend to have been out of school for long periods of time. Forty-five percent of the DPC students have been out of school less than one year. DPC students tend to use courses sporadically to improve job skills, not for degree programs.

Years Since Last Attended School (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Less than 1	65	45	67	74	81	75	71	69
1 - 5	20	26	17	16	11	15	17	17
6 - 10	6	10	5	4	3	5	5	6
11 - 10	6	12	7	4	3	4	5	6
More than 20	3	7	3	2	2	1	2	3

How Students Discovered This Telecourse

Students enrolled in BUS and DPC courses are most likely to have learned about the courses in newspaper advertisements. Students enrolled in ENG and SOC courses tend to be referred to these courses by friends. The semester course schedule is generally reported as the primary information source about telecourses.

How Students Discovered This Telecourse (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Semester course schedule	63	50	58	71	69	77	60	61
Telecourse brochure ..	10	10	4	8	5	7	8	8
Faculty advisor-counselor	4	8	8	6	4	4	6	6
Place of employment ..	2	6	2	3	1	0	2	3
Friend	10	7	18	8	13	8	16	13
Local PBS station	2	3	3	0	1	1	2	2
Local cable TV	1	3	1	2	1	0	2	1
Newspaper ad	5	9	1	1	1	1	2	3
Other	3	4	5	2	3	2	4	4

Currently Enrolled in On-Campus Course

The BUS and DPC courses have the largest percentages of students who are not enrolled in on-campus courses.

Currently Enrolled in On-Campus Course (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Yes	60	41	65	77	70	75	64	63
No	40	59	35	23	30	25	36	37

Credit Hours Enrolled in This Semester

BUS and DPC courses have the largest percentages of students enrolled in three or fewer credit hours. This generally means that the BUS or DPC course is the only course they are enrolled in.

Credit Hours Enrolled in This Semester (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
3 or fewer	22	40	11	10	12	5	15	18
4 - 6	26	29	29	23	19	19	26	25
7 - 9	19	9	22	19	21	23	19	18
10 - 12	18	10	17	18	21	24	18	18
More than 12	16	12	21	31	27	30	22	22

Most Important Reason for Enrolling in Telecourse

The number of students checking "interesting content" as the most important reason for enrolling in a given telecourse suggests that DPC, MPS, and OTH are the courses with the most general appeal to the public. The fact that fewer DPC students are enrolled in on-campus classes suggests that on-campus scheduling problems are not even an issue with them. The low percentage of DPC students indicating a conflict with work as the main reason for enrolling suggests that DPC students are not likely to be enrolled concurrently in other courses.

Most Important Reason for Enrolling in Telecourse (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Conflicts work	42	29	45	45	43	36	43	41
Conflicts leisure	14	7	13	10	9	11	13	12
Prefer at home	17	17	15	18	16	15	19	17
Interesting content ..	7	20	4	8	12	15	5	8
Transport problems ...	4	4	4	1	2	3	3	3
Other	16	23	18	19	18	20	18	19

Respondent's First Telecourse

BUS and DPC courses have the largest percentages of students who have not enrolled previously in a telecourse. This finding is substantiated further by the large percentages of students in DPC and BUS who report zero credit hours

earned in telecourses.

Respondent's First Telecourse (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
Yes	68	81	56	60	55	61	63	64
No	32	19	44	40	45	39	37	36

Credit Hours Earned Before by Telecourse

Students in data processing telecourses, followed by students in business telecourses, were least likely to have enrolled previously in telecourses. This is compatible with other data indicating that DPC and BUS telecourses are particularly attractive to people who have not attended college for several years and who want to improve job-related skills.

Credit Hours Earned Before by Telecourse (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
0	69	80	58	60	56	59	65	65
1 - 6	21	15	30	33	27	20	25	24
7 - 12	5	3	8	5	10	12	7	7
13 - 18	2	1	2	1	4	6	2	2
19 - 24	1	1	5	0	1	0	1	1
25 or more	2	1	8	0	2	3	1	1

How Student Intends to View Most of the Programs

DPC students are much less likely to view the programs in libraries. The data in general indicate that DPC students are somewhat different from other telecourse students.

How Student Intends to View Most of the Programs (Percent)

Course Type	BUS	DPC	ENG	HUM	MPS	OTH	SOC	TOTAL
At home--PBS	69	78	69	53	60	64	68	67
At home--cable	18	15	14	27	16	15	17	17
College library	10	4	14	18	20	16	12	13
Public library	2	0	1	0	2	5	1	1
At my work site	1	1	0	0	1	0	1	1
Other	1	1	2	1	1	1	1	1

SUMMARY

Overall differences among students enrolled in the seven course types are insignificant. The greatest differences are found when BUS and DPC courses are compared with the rest of the courses.

PART III

INDIVIDUAL COURSE COMPARISONS

A comparison by course type revealed that some differences appeared in student responses to questions regarding BUS, DPC, and other groups of courses. To determine whether variations in student responses are related to individual courses, the same survey data are examined for selected individual courses.

Nine separate courses are compared to identify the student characteristics relating to different types of courses. A total of 2,974 student surveys were examined. The following courses were chosen:

Telecourse Name	Code	College Course Name
America: The Second Century	(ASC)	U.S. History II
The Art of Being Human	(ABH)	Humanities
The Business of Management	(BOM)	Business of Management
Faces of Culture	(FAC)	Cultural Anthropology
The Money Puzzle	(TMP)	Macroeconomics
The New Literacy	(TNL)	Introduction to Computers
Introducing Biology	(IBI)	First Semester Biology
Oceanus	(OCE)	Environmental Geology
Understanding Human Behavior	(UHB)	Introduction to Psychology

Student Surveys Per Course

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB
Total 2,974	614	163	330	124	199	602	294	287	361

The number of instructions offering each course is as follows:

ASC	12
ABH	4
BOM	14
FAC	5
TMP	8
TNL	16
IBI	5
OCE	9
UHB	14

Again, the striking feature of the data is the similarity among courses. There are differences, however, and these and some general observations are presented below.

Gender

There is a spread of 13 percentage points between females and males enrolled in courses (IBI 72 percent and OCE 59 percent).

Gender (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
Female	65	70	69	71	60	68	72	59	66	68
Male	35	30	31	29	40	32	28	41	34	32

Age

"The New Literacy" has a noticeably older student body than any other telecourse. This is not surprising, because this type of course is more likely to appeal to the student who is not pursuing a degree. Telecourses most likely to be taken as part of a degree plan have the youngest students: "America: The Second Century," "The Money Puzzle," and "Understanding Human Behavior." "Oceanus" is an exception; even though it has a younger student body, it is less likely to be part of core curricula.

Age (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHG	TOTAL
Under 18	1	1	1	2	0	1	0	2	2	1
18 - 21	19	19	16	31	31	9	19	30	18	21
22 - 29	39	35	33	20	34	27	36	32	37	34
30 - 39	28	30	30	30	26	33	30	24	29	29
40 - 49	9	12	17	13	6	20	15	8	12	11
50 - 59	3	2	3	4	3	10	3	4	3	4

Ethnic Background

There is very little variation, by course, in the ethnic background of students.

Ethnic Background (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
Black	6	4	6	5	7	7	9	5	5	8
Caucasian	84	82	84	85	83	84	84	83	84	84
Hispanic	4	5	6	7	7	4	5	6	5	5
Oriental	3	7	1	2	1	3	1	3	2	2
Other	2	2	2	2	1	2	1	3	3	2

Marital Status and Number of Dependents

Because more older students are enrolled in "The New Literacy," students in that course tend to be married and have more dependents.

Marital Status (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
Single	35	34	30	44	47	27	29	51	35	35
Married	56	54	57	44	45	60	55	41	57	54
Divorced	9	12	13	12	8	13	15	8	9	11

Number of Dependents (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
0	42	48	43	50	57	43	41	56	42	45
1	20	16	21	19	19	19	16	15	19	18
2	18	20	20	15	10	19	20	15	18	18
3	12	11	7	8	9	10	15	9	12	10
4	5	6	6	6	3	6	6	3	6	5
5 or more	3	0	3	2	3	3	2	2	4	3

Hours Employed Per Week

Employment status is somewhat related to differences in courses. For example, the general interest and business courses appeal to people employed ("The Business of Management," 64 percent, and "The New Literacy," 61 percent), while general academic courses attract more people who work less and full-time students ("Understanding Human Behavior," 47 percent, and "Faces of Culture," 47 percent).

Hours Employed Per Week (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHG	TOTAL
Not employed	19	17	15	20	16	19	20	16	25	19
20 or fewer	10	12	9	11	11	9	7	16	7	10
20 - 39	16	23	12	22	20	11	15	16	21	18
40 or more	54	48	64	47	54	61	57	52	47	53

First Semester Enrolled in This College

Students enrolled in "The New Literacy" are much more likely to be enrolled in college for the first time. This conforms to the previous analysis of this course.

First Semester Enrolled in This College (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHG	TOTAL
Yes	14	11	26	19	8	40	8	16	27	20
No	86	89	74	82	92	60	92	84	73	80

Highest Level of Education Completed

"The New Literacy" is again the exception to the generally consistent patterns among courses. "The New Literacy" and "Understanding Human Behavior" have the largest percentage of students with no college education. It also has by far the largest percentage of students having at least a Bachelor's degree. Data from both of these educational groups support the conclusion that a disproportionate percentage of students enrolling in "The New Literacy" are not interested in obtaining a degree, but are enrolled in the course for other interests.

Highest Level of Education Completed (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
Less high school graduate	2	0	2	2	0	2	1	1	2	1
High school graduate ..	8	8	2	8	9	15	8	12	15	12
Some college	74	70	64	69	65	50	75	69	71	68
Associate degree	12	13	9	15	18	9	13	11	7	10
Bachelor's degree	3	9	10	7	6	15	2	6	3	7
Master's degree	1	0	2	2	1	7	1	2	1	2
Beyond Master's	0	0	2	0	1	2	0	0	1	1

Years Since Last Attended School

Consistent with the other responses, students in "The New Literacy" are least likely to have attended school within the past five years.

Years Since Last Attended School (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
Less than 1	74	67	58	71	80	47	85	80	66	69
1 - 5	15	17	23	20	12	24	9	11	17	17
6 - 10	5	6	7	5	5	10	2	4	7	6
11 - 20	4	6	7	4	2	12	2	4	6	6
More than 20	2	3	5	1	2	7	2	1	4	3

How Student Discovered This Telecourse

Student responses to this question varied considerably from course to course. The data suggest several trends that may prove useful in marketing telecourses:

a. On-campus students may be more likely to learn about telecourses in the semester course schedule (IBI and TMP).

b. People interested in general interest and business telecourses may be more likely to learn about them in newspaper advertisements and bulk mail brochures and flyers (BOM and TNL).

c. Students enrolled in colleges with an established telecourse program may be more likely to enroll in telecourses through recommendations from their friends (IBI and ASC).

How Student Discovered This Telecourse (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
Semester Course Schedule	58	68	57	57	72	51	65	73	62	61
Telecourse brochure ...	11	10	12	14	4	10	5	6	6	8
Faculty advisor-counselor	6	3	7	9	7	7	4	4	5	6
Place of employment ...	2	1	3	4	2	6	1	1	2	3
Friend	14	12	6	11	9	7	18	9	10	13
Local PBS station	2	1	3	2	2	3	1	1	3	2
Local cable TV	2	3	1	1	1	2	2	0	3	1
Newspaper ad	2	1	9	1	1	8	1	0	7	3
Other	4	3	3	1	3	5	2	5	4	4

Currently Enrolled On-Campus and Total Credit Hours Enrolled In

Consistent with the other responses, "The New Literacy" had the lowest percentage of students enrolled in on-campus classes and the highest percentage enrolled in three or fewer credit hours.

Currently Enrolled On-Campus (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHG	TOTAL
Yes	63	69	48	65	68	40	68	69	61	63
No	37	31	52	35	32	60	32	31	39	37

Total Credit Hours Enrolled In (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHG	TOTAL
3 or fewer	13	19	31	20	16	41	4	17	16	18
4 - 6	30	25	24	20	24	30	19	20	25	25
7 - 9	18	17	15	11	20	7	25	16	21	18
10 - 12	18	18	14	16	16	9	23	18	17	18
More than 12	21	21	16	34	24	12	28	29	21	22

Most Important Reason Enrolled in Section

"The New Literacy" and "Oceanus" deviate on several responses from the general trend among courses. Students for both courses were less likely to enroll because of conflicts and more likely to enroll out of interest in the course content.

Most Important Reason Enrolled in Section (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
Conflicts work	44	49	40	41	41	29	46	38	36	41
Conflicts leisure	13	13	13	11	15	6	11	9	12	12
Prefer at home	18	19	19	15	19	17	20	11	18	17
Interesting content ...	6	4	7	15	3	21	4	24	9	8
Transport problems	3	3	5	5	2	4	2	2	5	3
Other	16	12	16	15	20	23	17	16	21	19

Respondent's First Telecourse and Credit Hours Earned by Telecourses

The responses to these two questions indicate that "Introducing Biology" tends to be taken by students who have been in college for a while and who have completed more telecourses. It is not taken by entering freshmen or people interested in general enrichment. (Supporting data are found in responses to Years Since Last Attended School and Total Credit Hours Enrolled This Semester.)

Respondent's First Telecourse (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
Yes	57	62	71	54	55	79	37	66	77	64
No	43	38	29	46	45	21	63	34	23	36

Credit Hours Earned Before by Telecourse (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHB	TOTAL
0	58	62	71	56	56	79	38	68	78	65
1 - 6	29	30	22	27	31	15	31	21	15	24
7 - 12	9	7	4	6	10	3	15	7	5	7
13 - 18	1	0	1	8	1	1	8	2	1	2
19 - 24	1	0	1	1	1	1	4	1	1	1
25 or more	1	0	1	3	1	1	4	1	1	1

How Intend to View Most of Videos

"Introducing Biology" students, who tend to enroll in more on-campus courses, are also more likely to view the programs on campus.

How Intend to View Most of Videos (Percent)

Course Code	ASC	ABH	BOM	FAC	TMP	TNL	IBI	OCE	UHG	TOTAL
At home--PBS	69	52	72	79	68	79	47	65	69	67
At home--cable	14	36	15	10	12	15	23	13	18	17
College library	14	13	7	10	14	3	27	15	7	13
Public library	0	0	1	1	4	0	1	5	4	1
At my work site	1	0	3	0	0	1	1	1	1	1
Other	1	0	1	0	2	1	1	0	1	1

SUMMARY

A comparison of data from a selection of courses provides additional evidence that some types of courses attract particular types of students.

The pattern of student characteristics associated with "The New Literacy" offers specific evidence of the general pattern found to be associated with DPC courses. "The New Literacy" students are different from those enrolled in other courses except other DPC courses. They are older people who are less likely to be interested in obtaining a college degree. They are most likely to learn about the course from promotional activities designed to reach the non-campus student. They are least likely to be enrolled in other telecourses or in on-campus classes.

Not surprisingly, students in the "Business of Management" are similar to those in "The New Literacy," although "Business of Management" students are closer to the national sample. The "Business of Management" appeals to the employed professional who is upgrading job-related skills.

PART IV

METHODOLOGY

Data Collection

Participating ITC institutions received the questionnaire and instructions for college administrators and instructors in early 1984. In most cases, the questionnaires were given to students at orientation sessions at the start of the spring semester. In a few colleges, however, the questionnaires were given to students during the semester at testing periods. In at least one case, they were mailed to students.

Data were obtained from 42 colleges. All but three of the colleges were two-year institutions. (See Appendix A for a complete list.) Several colleges in the Northern Illinois Learning Resources Cooperative participated in the survey, but it was impossible to determine which colleges submitted the completed surveys.

The 42 telecourses included in the study were produced by a wide variety of institutions and consortia. Almost all contained 13 to 15 hours of video in half-hour programs. They were supplemented by textbooks, student study guides, and a variety of other materials. Only telecourses offered for college credit are included in this report. Telecourses had to be broadcast, cablecast, or both. In most cases students could view the programs on video cassettes at designated facilities such as libraries or learning centers.

Of the 25,000 questionnaire answer sheets returned to ITC members, 7,889 were acceptable for use in statistical analysis (response rate of approximately 35 percent). Surveys commonly yield a response rate of 14 percent to 24 percent, so the returns on this survey were above average.

Statistical Analysis

The Statistical Package for the Social Sciences (SPSS) was used to analyze the data. Percentages were selected as the descriptive statistics to identify variations in responses to each question. Cross-tabulations and Chi-Square statistics were used to infer associations among variables.

Interpretation

Data on students enrolled in telecourses were aggregated overall, by state and by type of course. Nine specific courses were selected for comparison. The data were cross-tabulated in several groups. Each group is preceded by a discussion of the tables.

Statistical tables and interpretative statements were distributed to several ITC members for comments and suggestions. Their responses have been incorporated in the final report.

STUDENT SURVEY: NATIONAL TABULATIONS
(in percents)

Gender of Respondents

Female	68
Male	32

Age in Years

Under 18	1
18 - 21	21
22 - 29	34
30 - 39	29
40 - 49	11
50 - 59	4

Ethnic Background of Respondents

Black	8
Caucasian	84
Hispanic	5
Oriental	2
Other	2

Marital Status

Single	35
Married	54
Divorced	11

Number of Dependents

0	45
1	18
2	18
3	10
4	5
5 or more	3

Hours per Week Employed

Not employed	19
20 or fewer	10
20 - 39	18
40 or more	53

First Semester Enrolled in This College

Yes	20
No	80

Highest Level of Education Completed

Less high school graduate	1
High school graduate	12
Some college	68
Associate degree	10
Bachelor's degree	7
Master's degree	2
Beyond Master's degree	1

Years Since Last Attended School

Less than 1	69
1 - 5	17
6 - 10	6
11 - 20	6
More than 20	3

How Discovered This Telecourse

Semester course schedule	61
Telecourse brochure	8
Faculty advisor-counselor	6
Place of employment	3
Friend	13
Local PBS station	2
Local cable TV	1
Newspaper advertisement	3
Other	4

Currently enrolled in On-Campus Courses

Yes	63
No	37

Total Credit Hours Enrolled in This Semester

3 or fewer	18
4 - 6	25
7 - 9	18
10 - 12	18
More than 12	22

Most Important Reason Enrolled in Section

Conflicts work	41
Conflicts leisure	12
Prefer at home	17
Interesting content	8
Transport problems	3
Other	19

Respondent's First Telecourse

Yes	64
No	36

Credit Hours Earned Before by Telecourse

0	65
1 - 6	24
7 - 12	7
13 - 18	2
19 - 24	1
25 or more	1

How Intend to View Most of Videos

At home	67
College library	13
Public library	1
At my work site	1
Other	1

PART V

CROSS-TABULATIONS

The data were cross-tabulated in several different ways. The number of usable student surveys varied for each series of cross-tabulations (crosstabs).

How Students Intend to View Programs

Eight crosstabs were run on the question that asked how students intended to view the video programs. For this analysis, the six responses to the question were combined in three categories: At Home (broadcast and cable), Libraries (college and public), and Other (work site and elsewhere).

- Students were most likely to view the programs at home if they learned about the telecourse from a PBS station or cable television. They were more likely to view the programs in a library if a college advisor/counselor recommended the course. Thus, students were likely to view a telecourse in the same setting in which they learned about it, i.e., at home or at a college. Promotional activities should be developed for each method of program viewing.
- Students enrolled in on-campus classes are more likely to view the telecourse programs on-campus than students not enrolled in on-campus classes (17.9 percent to 7.9 percent. Both types of students, however, plan to view most the programs at home (80.2 percent to 90.1 percent).
- There is a direct, positive relationship between the probability of a student viewing programs on-campus and the total number of credit hours in which he or she is enrolled (8.6 percent if three hours or fewer, 25.9 percent if more than 12 hours). Students enrolled in several classes are more likely to take more on campus; viewing programs in a library is therefore convenient for these students.

- Students enrolled for the first time at college are more likely to to view programs at home than are students who have been enrolled previously (90.4 percent versus 82.3 percent). Both types of students, however, prefer to view programs at home. Although there are several possible explanations, the most likely one may be that first-time telecourse students enroll because of the convenience of home viewing.
- Students enrolled in telecourses for the first time are more likely likely to view programs at home (86.2 percent versus 79.6 percent).
- There is a small but discernible relationship between gender and viewing patterns. Women are more likely to view programs at home (female 85.3 percent versus male 80.9 percent).
- There is a consistent relationship between age and viewing patterns particularly if the small number of respondents in the under-18 category is eliminated. As people become older they are more likely to view the programs at home (18 to 21 years old 77.4 percent, versus 50 to 59 years old 85.3 percent).
- Married people are more likely than singles to view programs at home (married 87.9 percent, versus single 78.2 percent).

The data support the widely held belief that people are more likely to view programs at home as demands (job, dependents, spouses) upon their time increase. The use of multiple delivery systems should increase enrollments by making it easier for prospective students to schedule their own time for viewing programs.

Gender of Respondents

- The percentage of telecourse students who are women increases with age (65.0 percent of the 18 to 21-year-old students are women, whereas 73.9 percent of those 50 to 59 years old are women).

- Women are more likely to be employed part-time than men; men are more likely to be employed full-time (51.8 percent of women respondents were employed part-time versus 36.3 percent of the men).

Marital Status

- More than two thirds of married, widowed, or divorced telecourse students have at least one dependent (married 77.0 percent, widowed and divorced 69.5 percent). Sixteen percent of single respondents indicate having at least one dependent.
- There is a significant relationship between hours employed and marital status. It is interesting to note that widowed or divorced students are the most likely to be employed full time (70.4 percent). Married students are next most likely (59.0 percent) and single students the least (38.3 percent).

Highest Level of Education Completed

- The age group with the most education is the 30 to 39 group followed by those between the ages of 22 and 29. There is no significant difference between men and women in the highest level of education they have achieved.
- There is a statistically significant relationship between ethnic background and level of education, although the variation is very small. Caucasians were only slightly more likely to have previously attended college (87.5 percent) than blacks (86.3 percent), Hispanics (85.0 percent), or Oriental respondents (79.7 percent).

How Discovered This Telecourse

- The data show that telecourse students learned about their course in different ways. On-campus students are much more likely than off-campus students to have learned about courses from the semester

course schedule (67.0 percent versus 50.1 percent).

Students not enrolled in on-campus classes are five times as likely to have learned about the telecourse through a newspaper advertisement (6.5 percent to 1.3 percent). A similar relationship, although not as strong, exists for the responses "place of employment," "local PBS station," and "local cable TV." It is particularly interesting to note that a higher percentage of students enrolled only in telecourses as compared to those also enrolled in on-campus courses learned about from friends (15.3 percent to 11.8 percent).

- The data also emphasize the importance of course schedules. The more credit hours a student has enrolled in, the more likely he or she learned about a telecourse from the semester course schedule.
- Off-campus promotion is an increasingly effective method of reaching potential students as the length of time since their last enrollment increases. Telecourse students who had not attended college recently indicated that they were more likely to learn about telecourses through off-campus promotion than students who had more recently attended school.

TABLE E4

How Discovered This Telecourse	Years Since Last Attended School		
	Less than 1	1 - 5	6 - 10
Course Schedule	65.6%	51.5%	47.9%
Telecourse Brochure	7.4	8.4	8.3
Advisor/Counselor	5.4	6.5	6.0
Work Place	1.9	4.1	4.5
Friend	12.3	15.5	13.7
PBS Station and Cable	2.7	3.6	6.4
Newspapers	1.6	5.1	8.9
Other	3.0	5.2	4.3

- Telecourse students with transportation problems were the most likely to enroll in a telecourse because of a friend or newspaper advertisement. Transportation problems, however, account for only 3.1 percent of the primary reasons given for enrolling in a telecourse.

First Semester Enrolled in This College

- Students taking only telecourses are more likely to be attending their current college for the first time. Of first-time students, 58.7 percent were enrolled in only telecourses compared to 31.0 percent of those who had previously enrolled in the college.
- The data indicate that the more courses in which a student enrolls, the less likely that he or she is attending a college for the first time.
- Although the data are statistically significant, there is actually little difference between the reasons first and former students give as most important in their decisions to enroll in telecourses.

- Of telecourse students who indicated that this was their first time at this college, 94.2 percent were also taking their first telecourse (19.0 percent of all respondents). This may indicate that telecourses draw new students to a college.

How Intend to View Most of Videos

- The proportion of students intending to view programs at home (83.8 percent), in a library (14.3 percent), or elsewhere (1.9 percent) varied little according to the reason given for enrolling in a telecourse.

PART VI

INTERPRETATION OF BETA WEIGHTS:

STUDENTS ENROLLING IN FIRST TELECOURSE

Twelve predictor variables were entered into a step-wise discriminant analysis to indentify the subset most strongly related to enrolling in a telecourse for the first time; 4,199 cases were used in the analysis. In addition to the ten variables listed in Table 6-1, the Number of Hours Currently Enrolled (six or fewer versus seven or more) and How Intend to View (at home versus not at home) were also entered into the analysis. These latter two variables were found not to provide additional predictive accuracy about the types of students enrolling in a telecourse for the first time.

In interpreting the Standardized Beta Weights shown in Table 1, it is important to note the values coded for the variables and the direction (plus or minus) of the weights. Beta Weights are statistics representing a standard unit increase in the predictor associated with a standard unit increase in the criterion (in this case, enrolling in a telecourse for the first time).

As shown by the relative differences in the Beta Weights of Table VII.1, Enrollment in College for the First Time is the single best predictor, followed by Years Since Last Attended College. Telecourses seem to attract students who have not been enrolled in this particular college before, or who have not attended any college with one year. The third best predictor is How Discovered Course: the majority of students enrolled in their first telecourse learned about it from friends or their workplace, rather than through college-distributed information and advertisements. Age is the fourth strongest predictor, indicating that older students tend to be more interested in telecourses. Education and Number of Dependents are equal as the fifth strongest predictors; telecourses appear to attract students with more

education and fewer dependents. Enrolled in On-Campus Courses is almost as strong a predictor as the previous two variables. It is interesting to note that Enrollment in Colleges for the First Time is approximately four times more important than Enrollment in On-Campus Courses, and that Years Since Last Attended College is approximately twice as important as Enrollment in On-Campus Courses.

Weak relationships between Students Enrolling in First Telecourse and Marital Status, Gender, and Reason Enrolled are indicated by the relatively small Beta Weights. Although weak, these data suggest that persons enrolling in a telecourse for the first time tend to be single, divorced, or male, and have transportation problems.

Because these ten variables can only correctly predict 62 percent of the cases, future research should target identification of the other important variables related to new enrollments in telecourses.

SUMMARY

This discriminant analysis supports several important justifications that colleges usually give for offering telecourses. The data clearly show that telecourse students tend to be enrolling in the college for the first time and are returning to formal education after some absence. The analysis also indicates that older adults are most likely to learn about telecourses from their friends or at their workplace. Thus, long-term increases in telecourse enrollments probably derive from students' satisfaction with them, because they will also encourage their friends to enroll in telecourses.

The data do not address the question of subsequent enrollment in telecourses by students who have enrolled in a particular college for the first time. Do they then enroll in only on-campus classes in subsequent semesters? If so, is this because there are no other telecourses in their

degree program, or because they dislike telecourses? Future research should track new students over several semesters to answer such questions.

TABLE 6-1

Standardized Beta Weights of Variables Significantly Related to Students Enrolling in First Telecourse
(Yes=1, No=2)

Percentage of Cases Correctly Predicted	62.00 %
Enrolled in this college for first time (yes=1, no=2)	+.76
Years since last attended college (less than 1=1, greater than 1=20)	-.29
How discovered course (course schedule, brochure, faculty advisor, ads on PBS/cable, newspaper=1, friend and workplace=2)	-.25
Age (less than 30 years=1, 30 years or older=2)	+.20
Education (some college or lower=1, college graduate=2)	-.16
Number of dependents (none=1, one or more=2)	+.16
Enrolled in on-campus courses (yes=1, no=2)	+.14
Marital status (married=1, single or divorced=2)	-.11
Gender (female=1, male=2)	-.08
Reason enrolled (conflict with work of leisure=1, transportation problems=2)	-.07

INTENTIONS TO VIEW PROGRAMS

Thirteen predictor variables were entered into a step-wise discriminant analysis for the purpose of identifying the subset most strongly related to viewing telecourses at home; 829 cases were included in the analysis. In addition to the seven significant variables listed in Table 6-2, First Enrollment in a Telecourse (yes versus no), Education (some college or less versus college graduate or higher), Age (less than 30 versus over 30), Total Hours Enrolled This Semester (six or fewer versus seven or more), Number of Dependents (one versus more than one), and Employment (unemployed versus employed) were also entered into the analysis. These last six variables failed to provide additional accuracy in predicting whether students intended to view television programs at home.

As shown by the relative differences in Beta Weights of Table 6-2, the two best predictors of viewing telecourses at home are How Discovered Telecourse and Reason Enrolled. Learning about the telecourse from friends and the workplace and enrolling because of transportation problems are related positively to intentions to view at home. Enrollment in College for the First Time and Enrolled in On-Campus Courses are equivalent in predicting intentions to view at home. Students who are enrolled in college for the first time appear to prefer viewing telecourses in their homes. Students who are not enrolled in an on-campus course also tend to prefer viewing telecourses at home. The fourth best predictor of intentions to view telecourses at home is Marital Status, followed by Gender and Years Since Last Attended College. Married students, females, and students who have not attended college during the past year tend to view telecourses at home.

Since these seven variables can predict only approximately 64 percent of the cases, future research should target identification of other variables

accounting for the remaining 36 percent.

SUMMARY

This discriminant analysis indicates that viewing telecourses at home is particularly attractive to individuals who heard about them from friends or co-workers, have transportation problems, have enrolled in the particular college for the first time, and are not enrolled in on-campus courses.

TABLE 6-2

Standardized Beta Weights of Variables Significantly Related to Intentions to View Telecourses at Home
(Other=1, At home=2)

Percent of cases correctly predicted	63.6 %
How discovered course (course schedule, brochure, faculty advisor, ads on PBS/cable, newspaper=1, friend and workplace=2)	+.46
Reason enrolled (conflict with work or leisure=1, transportation problems=2)	+.38
Enrolled in this college for first time (yes=1, no=2)	-.36
Enrolled in on-campus courses (yes=1, no=2)	+.36
Marital status (married=1, single or divorced=2)	-.30
Gender (female=1, male=2)	-.25
Years since last attended college (less than 1=1, greater than 1=2)	-.18

CONCLUDING COMMENTS

This report is a single but significant step in the long process of obtaining information from telecourse students to serve them better. The data provide information for administrators and faculty on many different telecourse issues, for example, the selection of delivery systems, marketing, and the selection of telecourses. We hope that readers will find the data and analysis useful in understanding telecourse viewing in their own institutions.

The report leaves some questions unanswered:

- Are these differences in student characteristics between college credit and non-credit telecourses? If so, what implications do these have for course selection, marketing, delivery systems, and support services?
- Do telecourse student characteristics change at a college as the length of time it has been offering telecourses increases?
- Are telecourse students significantly different from other students at the college who are enrolled in print-based independent study or extension courses?
- How do telecourse student characteristics compare to students at the same institution who are enrolled in live multi-site instruction via a telecommunication system (telelearning)?

These and other questions are becoming increasingly important as colleges expand their use of telecommunication systems for instruction. This should be addressed in future research efforts.

Perhaps the most important research that needs to be undertaken is a multi-college study of the effectiveness of telecourse instruction. Many colleges offering telecourses periodically undertake such studies, and producers evaluate their products before they are distributed. A large

multi-college telecourse evaluation, however, could provide valuable data on student retention and grade performance, lead to the development of a telecourse pre-assessment questionnaire for advising, and produce recommendations for instructional materials, delivery systems, support services, and the role of faculty.

APPENDIX A

TELECOURSES IN ITC STUDENT SURVEY

TELECOURSE NAME

America: The Second Century
American Government I
American Government II
American Government Survey
The American Story
The Art of Being Human
The Ascent of Man
Basic Electricity and AC-DC Circuits
The Business of Management
Communicating Through Literature
Computers at Work
Contemporary Health Issues
Conversemos (Let's Talk)
Earth, Sea & Sky
English Composition I & II
English Composition II
Faces of Culture
Family Portrait
Focus on Society
Footsteps
The Growing Years
Here's to Your Health
History of Mexico
The Home Gardener
Humanities Through the Arts
In Our Own Image
It's Everybody's Business
Introducing Biology
Introduction to Mathematics
The Long Search
Making It Count
The Money Puzzle
The New Literacy
Oceanus
Of Earth and Man
Personal Finance and Money Management
Project Universe
Reading Improvement
Understanding Human Behavior
Voyage
Western Civilization I
Writing for a Reason

APPENDIX B

PARTICIPATING INSTITUTIONS

Amarillo College	Amarillo, TX
Austin Community College	Austin, TX
Beaufort County Community College	Washington, NC
Brevard Community College	Cocoa, FL
Cameron University	Lawton, OK
Catawba Valley Technical College	Hickory, NC
Catonsville Community College	Catonsville, MD
Central Piedmont Community College	Charlotte, NC
Chicago City Wide College	Chicago, IL
Cleveland Technical College	Shelby, NC
Coastal Carolina Community College	Jacksonville, NC
Compton Community College	Compton, CA
Crafton Hills College	Yucaipa, CA
Cypress College	Cypress, CA
Dallas County Community College District	Dallas, TX
Durham Technical Institute	Durham, NC
El Camino College	Via Torrance, CA
El Reno Junior College	El Reno, OK
Fullerton College	Fullerton, CA
Governor's State University	Park Forest South, IL
Guilford Technical Community College	Jamestown, NC
Manatee Junior College	Bradenton, FL
Miami-Dade Community College	Miami, FL
NILRC Colleges	Illinois
Oklahoma City Community College	Oklahoma City, OK
Palomar College	San Marcos, CA
Pasadena City College	Pasadena, CA
Pensacola Junior College	Pensacola, FL
Rio Salado Community College	Phoenix, AZ
Riverside City College	Riverside, CA
Rogers State College	Claremore, OK
Rose State College	Midwest City, OK
Rowan Technical College	Salisbury, NC
Saddleback Community College	Mission Viejo, CA
San Bernadino Valley College	San Bernadino, CA
Santa Barbara City College	Santa Barbara, CA
Southwestern Oklahoma State University	Weatherford, OK
St. Petersburg Junior College	St. Petersburg, FL
Tallahassee Community College	Tallahassee, FL
Tarrant County Junior College	Ft. Worth, TX
Technical College of Alamance	Haw River, NC
Vallencia Community College	Orlando, FL

APPENDIX C

TELECOURSE STUDENT SURVEY: ITC MEMBER COLLEGES

1. Sex: (A) female (B) male

2. Age:
   (A) under 18
   (B) 18-21
   (C) 22-29
   (D) 30-39
   (E) 40-49
   (F) 50-59
   (G) 60 or over

3. Ethnicity:

   (A) Black
   (B) Caucasian
   (C) Hispanic
   (D) Native American
   (E) Oriental
   (F) Other

4. Marital status:

   (A) Single
   (B) Married
   (C) Widowed or Divorced

5. Number of dependents:

   (A) 0
   (B) 1
   (C) 2
   (D) 3
   (E) 4
   (F) 5 or more

6. How many hours per week are you currently employed?

   (A) Not employed
   (B) 20 or fewer
   (C) 20-39
   (D) 40 or more

7. Is this your first semester enrolled at the college?

   (A) Yes (B) No

8. What is the highest level of education that you have completed?

   (A) Less than high school graduate
   (B) High school graduate
   (C) Some college
   (D) Associate degree
   (E) Bachelor's degree
   (F) Master's degree
   (G) Beyond Master's (Ph.D. or professional degree)

9. How many years since you last attended school or college?

   (A) Less than 1
   (B) 1-5
   (C) 6-10
   (D) 11-20
   (E) More than 20

10. How did you find out about this telecourse?

(A) Semester course schedule
(B) Telecourse brochure
(C) Faculty advisor or counselor
(D) At place of employment
(E) Friend
(F) Local PBS television station
(G) Local cable television system
(H) Newspaper advertisement
(I) Other

11. Are you currently enrolled in any on-campus courses at the college?

(A) Yes (B) No

12. What are the total number of credit hours you are enrolled in this semester?

(A) 3 or fewer (D) 10-12
(B) 4-6 (E) more than 12
(C) 7-9

13. Which is the MOST important reason you enrolled in the telecourse section of this course?

(A) On-campus sections conflict with work schedule
(B) On-campus sections conflict with non-work schedule
(C) I prefer taking courses at home
(D) Because of the interesting content of the telecourse
(E) Transportation problems
(F) Other

14. Is this your first telecourse?

(A) Yes (B) No

15. How many credit hours have you previously earned by telecourses?

(A) 0 (D) 13-18
(B) 1-6 (E) 19-24
(C) 7-12 (F) 25 or more

16. How do you intend to view most of the video programs?

(A) At home--broadcast on PBS television station
(B) At home--cable television (if the program is a PBS station being carried on cable, mark A.)
(C) At a college library or learning resource center
(D) At a public library
(E) At my work site
(F) Other

BEST COPY AVAILABLE

The Annenberg/CPB Project
1111 Sixteenth Street NW
Washington, DC 20036

American Association of Community and Junior Colleges
One Dupont Circle N.W. • Suite 410 • Washington, D.C. 20036